

AMENDMENT

In response to the Office Action dated June 6, 2002, please amend the above-identified patent application as follows:

In the Claims:

Please amend claim 1 as follows:

1. (Amended) A thermoplastic composition formed by the melt blending of:
 - a. A primary thermoplastic crystalline polymer present in the amount of 60 to 99 weight percent.
 - b. A secondary elastomeric polymer present in the amount of 1 to 40 weight percent.
 - c. An isocyanate or epoxy compound present in the amount of 0.1 to 3.0 percent based on the weight of the primary thermoplastic crystalline polymer.
 - d. A catalyst present in the amount of 0.001 to 5.0 percent based on the weight of the primary thermoplastic crystalline polymer.
2. The composition of claim 1 wherein an interpenetrating network is created with said thermoplastic composition.

Please amend claim 3 as follows:

3. (Amended) The composition of claim 1 wherein said blending results in the formation of at least one interpenetrating network within said thermoplastic composition.

Please cancel claim 4.

Please amend claim 5 as follows:

5. (Amended) The composition of claim 1 wherein said secondary polymer is compatible for blending with said primary thermoplastic crystalline polymer.
6. The composition of claim 1 wherein said components are dynamically blended.
7. The composition of claim 1 wherein said components are not dynamically blended.

Please amend claim 8 as follows:

8. (Amended) The composition of claim 1 wherein said secondary elastomeric polymer is dissimilar to said primary thermoplastic crystalline polymer.

Please amend claim 9 as follows:

9. (Amended) The composition of claim 1 wherein said primary thermoplastic crystalline polymer is polyethylene terephthalate.

10. The composition of claim 9 wherein an interpenetrating network is created within said thermoplastic composition.

Please cancel claim 11.

Please amend claim 12 as follows:

12. (Amended) The composition of claim 1 where the primary thermoplastic crystalline polymer may be composed of several polymer types or mixtures such as would occur in using a recycled source of polymer.

Please cancel claim 13.

14. The composition of claim 1 wherein said catalyst is compounded into said secondary polymer in advance of blending.

Please amend claim 15 as follows:

15. (Amended) The composition of claim 1 wherein said isocyanate compound is methylenediphenylene diisocyanate ("MDI").

16. The composition of claim 1 wherein the number of isocyanate or epoxy compounds is one.

17. The composition of claim 1 wherein the number of isocyanate or epoxy compounds is more than one.

Please cancel claim 18.

Please cancel claim 19.

Please cancel claim 20.

Please cancel claim 21.

22. The composition of claim 1 further comprising at least one heat stabilizer component.

Please cancel claim 23.

Please cancel claim 24.

Please cancel claim 25.

Please cancel claim 26.

Please cancel claim 27.

Please cancel claim 28.

Please cancel claim 29.

Please cancel claim 30.

Please cancel claim 31.

Please cancel claim 32.

Please cancel claim 33.

Please cancel claim 34.

Please cancel claim 35.

Please cancel claim 36.

Please cancel claim 37.

Please amend claim 38 as follows:

38. (Amended) The composition of claim 1 wherein said at least one catalyst is selected from the group: dibutyltin dilaurate, maleate, precursors for phenolic resin, urea, melamine, dioctyltin dilaurate, sulphuric acid, sodium acetate, zinc chloride, carbamide, 5-phenyltetrazole, tert-butyl peroxy 2-ethylhexyl carbonate, tert-butyl peroxy-3,5,5-trimethylhexanoate, 2,5-Dimethyl-2,5-di(tert-butylperoxy)hexane, tert-butyl peroxybenzoate.

Please amend claim 39 as follows:

39. (Amended) The composition of claim 1 wherein the number of catalysts is one.

Please amend claim 40 as follows:

40. (Amended) The composition of claim 1 wherein the number of catalysts is more than one.

Please amend claim 41 as follows:

41. (Amended) The composition of claim 1 wherein said isocyanate is selected from the group: 4,4'-phenylmethane diisocyanate (MDI), polymethylene polyphenyl, polyisocyanate (PAPI).

Please amend claim 42 as follows:

42. (Amended) The composition of claim 1 wherein said epoxy is selected from the group: phenols, bisphenols, aromatic epoxy resin and cycloaliphatic epoxy resin.

Please amend claim 43 as follows:

43. (Amended) The composition of claim 1 wherein the melt temperature is sufficient to ensure at least two phases have 3-dimensional spatial continuity resulting from the dynamic curing in the presence of said catalyst.

Please cancel claim 44.

Please amend claim 45 as follows:

45. (Amended) The composition of claim 1 wherein said first polymer is from a scrap source.

Please cancel claim 46.

Please cancel claim 47.

Please cancel claim 48.

Please cancel claim 49.

Please cancel claim 50.

Please cancel claim 51.

Please amend claim 52 as follows:

52. (Amended) The composition of claim 1 further comprising the addition of at least one of the following additives during blending: antioxidants, stabilizers, dyes, flame-retardants, extenders, UV stabilizers and processing aids.

Please cancel claim 53.

Please amend claim 54 as follows:

54. (Amended) The composition of claim 1 wherein said melt blending is performed in an extruder.

Please cancel claim 55.

Please amend claim 56 as follows:

56. (Amended) The composition of claim 1 wherein said melt blending is performed in an application unit.

Please amend claim 57 as follows:

57. (Amended) The composition of claim 1 wherein the application unit is an injection molder.

Please amend claim 58 as follows:

58. (Amended) The composition of claim 1 wherein said catalyst is present at a level of 0.001 to 10.0 weight percent, based on the weight of said first polymer.

Please amend claim 59 as follows:

59. (Amended) The composition of claim 1 further comprising the addition of at least one additional heat stabilizer during the melt blending.

Please cancel claim 60.

Please cancel claim 61.

Please cancel claim 62.

Please cancel claim 63.

Please cancel claim 64.

Please cancel claim 65.

Please cancel claim 66.

Please cancel claim 67.

Please cancel claim 68.